

# CRS Report for Congress

## Biofuels in the 2007 Energy and Farm Bills: A Side-by-Side Comparison

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Prepared for Members and  
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# Biofuels in the 2007 Energy and Farm Bills: A Side-by-Side Comparison

## Summary

On December 19, 2007, President Bush signed the Energy Independence and Security Act of 2007 (EISA, P.L. 110-140). Among other provisions, the new law significantly expands existing programs to promote biofuels. This report provides a side-by-side comparison of biofuels-related provisions in EISA with prior law, and with comparable provisions in the House and Senate farm bills. The House passed its version of the farm bill, H.R. 2419 (the Farm, Nutrition, and Bioenergy Act of 2007) on July 27, 2007. The Senate passed its version (the Food and Energy Security Act of 2007) on December 14, 2007, and requested a conference with the House on the same day.

Both of these farm bill versions contain a distinct energy title (Title IX) that covers a wide range of energy and agricultural topics with extensive attention to biofuels, including ethanol and biodiesel.

Key biofuels-related provisions of EISA and the two farm bills include:

- a major expansion of the renewable fuel standard (RFS) established in the Energy Policy Act of 2005 (P.L. 109-58) [EISA];
- expansion and/or modification of tax credits for alternative fuel refueling infrastructure and for ethanol, and renewable diesel fuels [Senate farm bill];
- grants and loan guarantees for biofuels research, development, deployment, and production [EISA, both farm bills];
- studies of the potential for ethanol pipeline transportation, expanded biofuel use, market and environmental impacts of increased biofuel use, and the effects of biodiesel on engines [EISA, Senate farm bill]; and
- reauthorization of biofuels R&D at the U.S. Department of Energy [EISA] and the U.S. Department of Agriculture [both farm bills].

This report includes information from CRS Report RL34130, *Renewable Energy Policy in the 2007 Farm Bill*, by Randy Schnepf and Tom Capehart, and CRS Report RL34136, *Biofuels Provisions in the Energy Independence and Security Act of 2007 (P.L. 110-140), H.R. 3221, and H.R. 6: A Side-by-Side Comparison*, by Brent D. Yacobucci.

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# Biofuels in the 2007 Energy and Farm Bills: A Side-by-Side Comparison

## Introduction

With recent high energy prices, concerns over energy security, desire to promote rural business, and the desire to reduce air pollutant and greenhouse gas emissions, there is ongoing congressional interest in promoting greater use of alternatives to petroleum fuels. Biofuels — transportation fuels produced from plant and animal materials — have attracted particular interest. Ethanol and biodiesel, the two most widely used biofuels, receive significant federal support in the form of tax incentives, loan and grant programs, and regulatory programs.<sup>1</sup>

The Energy Policy Act of 2005 (EPAct, P.L. 109-58) established a renewable fuel standard (RFS). The RFS requires the increasing use of renewable fuel in gasoline, starting at 4.0 billion gallons in 2006, increasing to 7.5 billion gallons in 2012. Although not an explicit ethanol mandate, it is expected that the majority of this requirement will be met using corn-based ethanol.<sup>2</sup> About 4.0 billion gallons of corn ethanol were consumed in 2005, so the RFS under P.L. 109-58 represents roughly a doubling of U.S. ethanol consumption over seven years. However, the U.S. ethanol industry is expanding rapidly, outpacing the required growth in the RFS. As of November 1, 2007, existing U.S. production capacity was roughly 7.0 billion gallons per year, with another 6.5 billion gallons of capacity under construction or in the planning stages. Because this capacity would likely outpace the RFS under P.L. 109-58, some proponents of corn-based ethanol supported an increase in the mandated levels of the RFS.

On December 19, 2007, President Bush signed the Energy Independence and Security Act of 2007 (EISA). Among other provisions, the new law significantly expands the RFS established under EPAct. Instead of requiring 5.4 billion gallons of renewable fuel in 2008, the new law requires 9.0 billion gallons. Further, the new law requires 36 billion gallons of renewable fuel in 2022, as compared to an estimated 8.6 billion gallons under EPAct.

Because of the rapid expansion of U.S. corn ethanol capacity, there are concerns that the United States will soon reach the limit of ethanol that can be produced from corn. Critics of corn-based ethanol argue that the industry does not need continued

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<sup>1</sup> For more information on federal biofuels incentives, see CRS Report RL33572, *Biofuels Incentives: A Summary of Federal Programs*, by Brent D. Yacobucci.

<sup>2</sup> For more information on ethanol, see CRS Report RL33290, *Fuel Ethanol: Background and Public Policy Issues*, by Brent D. Yacobucci.

government support, and that current corn demand for ethanol is putting a strain on corn and other grain markets, leading to increases in other commodity prices, such as livestock feed, which then leads to higher dairy and meat prices.<sup>3</sup> Critics also argue that the environmental costs of corn-based ethanol may outweigh the benefits.

Because of concerns over corn-based ethanol, as well as interest in diversifying energy supply, there is growing interest in developing biofuels that rely on other sources of biomass, including agricultural wastes, municipal solid waste, and dedicated energy crops such as perennial grasses, fast-growing trees, and algae. This interest has led to proposals to support and/or mandate biofuels produced from feedstocks other than corn starch through explicit requirements, R&D funding, and/or tax incentives.<sup>4</sup> Non-corn biofuels could include fuels produced from cellulosic material (such as perennial grasses), ethanol produced from sugarcane or beets, and biodiesel or renewable diesel produced from vegetable or animal oils.<sup>5</sup> Under EISA, starting in 2009, the RFS will require that an increasing amount of the mandate be met through the use of “advanced biofuels” – biofuels produced from feedstocks other than corn starch.

## Key Elements of EISA and the House and Senate Farm Bills

This report provides a side-by-side comparison of biofuels-related provisions in EISA with the House and Senate farm bills. President Bush signed EISA on December 19, 2007. The House passed its farm bill, H.R. 2419 (the Farm, Nutrition, and Bioenergy Act of 2007) on July 27, 2007. The Senate passed its version (the Food and Energy Security Act of 2007) on December 14, 2007, and requested a conference with the House on the same day.

All three bills cover a wide range of energy and agricultural topics in addition to biofuels.

**Table 1** contains a section-by-section comparison of the biofuels provisions in current or prior law with EISA and the House and Senate farm bills. The table is organized in the same order as EISA, followed by provisions in the House farm bill, with non-comparable Senate farm bill sections shown at the end. Key provisions of the bills include:

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<sup>3</sup> For more information on the issues surrounding rapid ethanol expansion, see CRS Report RL33928, *Ethanol and Biofuels: Agriculture, Infrastructure, and Market Constraints Related to Expanded Production*, by Brent D. Yacobucci and Randy Schnepf.

<sup>4</sup> Non-corn-starch feedstocks include other parts of the corn plant, such as the husks and the stalks, which are high in cellulose.

<sup>5</sup> For more information on biodiesel, see CRS Report RL32712, *Agriculture-Based Renewable Energy Production*, by Randy Schnepf.

- a major expansion of the renewable fuel standard (RFS) established in the Energy Policy Act of 2005 (P.L. 109-58) [EISA];
- expansion and/or modification of tax credits for alternative fuel refueling infrastructure and for ethanol, and renewable diesel fuels [Senate farm bill];
- grants and loan guarantees for biofuels research, development, deployment, and production [EISA, both farm bills];
- studies of the potential for ethanol pipeline transportation, expanded biofuel use, market and environmental impacts of increased biofuel use, and the effects of biodiesel on engines [EISA, Senate farm bill]; and
- reauthorization of biofuels R&D at the U.S. Department of Energy [EISA] and the U.S. Department of Agriculture [both farm bills].

**Table 1. Comparison of Current or Prior Law with Biofuels Provisions in EISA and the House and Senate Farm Bills**

Topic	Current or Prior Law	Energy Independence and Security Act (P.L. 110-140)	House Farm Bill — H.R. 2419 (House Version)	Senate Farm Bill — H.R. 2419 (Senate Version)	Notes
<b>P.L. 110-140, Title I — Energy Security Through Improved Fuel Economy</b>					
<b>Consumer Information</b>	No prior provision.	The Secretary of Transportation is required to carry out an educational program to inform consumers about the fuel savings and emissions benefits of new vehicles, including the benefits from the use of alternative fuels. [Sec. 105]	No comparable provision.	No comparable provision.	
<b>Fuel Tank Labeling Requirement</b>	No current provision.	Requires the Secretary of Transportation to issue a final rule by June 2011 requiring automakers to clearly label the fuel compartment of alternative fuel vehicles with the form of alternative fuel stated on the label. [Sec. 105]	No comparable provision.	No comparable provision.	
<b>Extension of Flexible Fuel Vehicle Credit Program / Biodiesel as Alternative fuel for CAFE Purposes</b>	Under the Corporate Average Fuel Economy (CAFE) program, automakers may generate credits toward their compliance for the production and sale of alternative fuel vehicles, as defined in law. Currently, B20 (a blend of 20% biodiesel and 80%	Amends the CAFE program to extend alternative fuel vehicle credits through model year 2019, at a declining rate. Also allows vehicles capable of operating on B20 to be treated as vehicles eligible for CAFE credits. [Sec. 109]	No comparable provision.	No comparable provision.	Expanding the definition of alternative fuel vehicle to include B20 could make all diesel passenger cars and light trucks eligible for credits under CAFE. Currently, some diesel passenger vehicles are

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	petroleum diesel) vehicles are not considered alternative fuel vehicles. [49 U.S.C. 32901 et seq.]				warranted to run on B5, but there seem to be few technical barriers to making some or all new diesel vehicles B20-capable.
<b>P.L. 110-140, Title II — Energy Security Through Increased Production of Biofuels</b>					
<b>Renewable Fuel Standard</b>	The Energy Policy Act of 2005 established a Renewable Fuel Standard (RFS) which requires the use of an increasing amount of renewable fuels in gasoline. The mandate increases from 4.0 billion gallons in 2006 to 7.5 billion gallons in 2012. Starting in 2013, the proportion of renewable fuel to gasoline must equal or exceed the proportion in 2012. Starting in 2013, of the amount mandated above, at least 250 million gallons must be fuel derived from cellulosic material. [P.L. 109-58, Sec. 1501]	Amends the RFS to include all transportation fuels (except for fuels used in ocean-going vessels). Expands the existing requirement to 9.0 billion gallons in 2008, increasing to 36 billion gallons in 2022. Requires renewable fuels produced at new facilities to have at least 20% lower lifecycle greenhouse gas (GHG) emissions than petroleum fuels. Starting in 2009, requires that an increasing amount of the above mandate be met using “advanced biofuels,” defined as biofuels derived from feedstocks other than corn starch with 50% lower lifecycle GHG emissions. By 2022, requires 21 billion gallons of advanced biofuel. Of the advanced biofuel mandate, there are specific carve-outs for cellulosic fuels and biomass-	No comparable provision.	No comparable provision.	



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		derived diesel substitutes. [Sec. 202]			
<b>Study of Impact of Increased Renewable Fuel Use</b>	<p>By August 2009, the Environmental Protection Agency (EPA) must publish a draft analysis of the effects of the fuels provisions in P.L. 109-58 on air pollutant emissions and air quality. [P.L. 109-58, Sec. 1505]</p> <p>EPA is required to conduct a survey to determine the market share of gasoline containing ethanol and other renewable fuels. [P.L. 109-58, Sec. 1501(c)]</p> <p>DOE is required to collect and publish monthly survey data on the production, blending, importing, demand, and price of renewable fuels, both on a national and regional basis. [P.L. 109-58, Sec. 1508]</p>	<p>The Secretary of Energy, in consultation with the Secretary of Agriculture and the EPA Administrator, is required to enter into an agreement with the National Academy of Sciences (NAS) to study the impacts of the RFS on industries related to feed grains, livestock, food, forest products, and energy. The NAS study must assess the likely effects on domestic animal agriculture and policy options to alleviate negative effects; identify agricultural conditions that would warrant a waiver of the RFS requirements; and make recommendations to limit adverse economic impacts from the RFS. [Sec. 203]</p>	No comparable provision.	No comparable provision.	
<b>Environmental and Resource Conservation Impacts</b>	No prior provision.	The EPA Administrator, in consultation with the Secretaries of Agriculture and Energy, must study the impacts of the RFS on environmental issues, resource conservation issues, and	No comparable provision.	No comparable provision.	

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		invasive or noxious species. [Sec. 204]			
<b>Biomass Based Diesel and Biodiesel Labeling</b>	No prior provision.	The Federal Trade Commission is required to promulgate rules requiring diesel retailers to label their pumps with the percentage of biomass-based diesel or biodiesel that is offered for sale. [Sec. 205]	No comparable provision.	No comparable provision.	
<b>Study of Credits for Use of Renewable Electricity in Electric Vehicles / Production of Renewable Fuel Using Renewable Energy</b>	Under the existing RFS, cellulosic biofuels are eligible for additional credits under the mandate. A gallon of cellulosic biofuel is considered equal to 2.5 gallons of ethanol. For this section, “cellulosic biofuels” includes both biofuels produced from cellulose and biofuels produced from sugars or starches (e.g., corn ethanol) if biomass is used to displace fossil energy in the refining of the fuel. [P.L. 109-58, Sec. 1501]	The EPA Administrator is required to study the feasibility of issuing credits under the RFS for electric vehicles powered by electricity from renewable resources. Within 180 days of enactment, EPA must report to Congress on the findings of the study. [Sec. 206]	No comparable provision.	Authorizes USDA to provide cost-sharing grants and loan guarantees available for repowering existing biorefineries operating on fossil fuels to switch to renewable energy. (For more information, see “Loan Guarantees and Grants for Biorefineries and Biofuel Production Plants,” above.) [Sec. 9005]	
<b>Grants for Production of Advanced Biofuels</b>	The Secretary of Energy may provide grants for the construction of facilities to produce renewable fuels (including ethanol) from cellulosic biomass,	Requires the Secretary of Energy to establish a grant program for the production of advanced biofuels that have at least an 80% reduction in lifecycle greenhouse gas	No comparable provision.	No comparable provision.	Advanced biofuels are biofuels produced from feedstocks other than corn starch. (See Sec. 202 of EISA.)

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	agricultural byproducts, agricultural waste, and municipal solid waste. A total of \$750 million is authorized for FY2006-FY2008. [P.L. 109-58, Sec. 1512]	emissions relative to current fuels. Authorizes a total of \$500 million for FY2008-FY2015. [Sec. 207]			
<b>Integrated Consideration of Water Quality in Determinations on Fuels and Fuel Additives</b>	Section 211(c) of the Clean Air Act allows the EPA Administrator to control or prohibit the production and/or sale of any engine, vehicle, fuel, or fuel additive that causes or contributes to air pollution “that may be reasonably anticipated to endanger the public health or welfare.” [42 U.S.C. 7545(c)]	Expands EPA’s authority to control engines, vehicles, fuels, and fuel additives under Sec. 211(c) of the Clean Air Act to include effects on water pollution. [Sec. 208]	No comparable provision.	No comparable provision.	
<b>Anti-Backsliding</b>	No prior provision.	Requires the EPA Administrator to study the potential adverse effects to air quality from the expanded RFS, and to promulgate regulations to mitigate those effects. [Sec. 209]	No comparable provision.	No comparable provision.	
<b>Effective Date, Savings Provision, and Transition Rules</b>	No prior provision.	For 2008 and 2009, any ethanol plant powered by natural gas, biomass, or a combination of the two is treated as having a 20% reduction in lifecycle	No comparable provision.	No comparable provision.	

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		greenhouse gas emissions (See Sec. 202). For 2008, all current EPA regulations on the RFS apply, except for the increase in the volume mandated by Sec. 202. [Sec. 210]			
<b>Biodiesel Report</b>	No prior provision.	Requires the Secretary of Energy to report to Congress on the R&D challenges to expanding biodiesel use (to an unspecified level) [Sec. 221]	No comparable provision.	No comparable provision.	Currently, biodiesel represents less than 1% of total diesel consumption.
<b>Biogas Report</b>	No prior provision.	Requires the Secretary of Energy to report to Congress on the R&D challenges to expanding biogas and biogas/natural gas blends (to an unspecified level). [Sec. 222]	No comparable provision.	No comparable provision.	
<b>Grants for Biofuel Production and R&amp;D in Certain States</b>	The Secretary of Energy is authorized to receive \$25 million annually for FY2006-FY2010 for R&D and implementation of renewable fuel production technologies in states with low rates of ethanol production that are under the federal reformulated gasoline (RFG) program. [P.L. 109-58, Sec. 1511(d)]	Authorizes \$25 million annually for FY2008-FY2010 for R&D and commercial application of biofuel production in states with low rates of ethanol and cellulosic ethanol production (this could in effect apply to all states). [Sec. 223]	No comparable provision.	No comparable provision.	

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<b>Biorefinery Energy Efficiency</b>	The Secretary of Energy is directed to conduct research on commercial applications of biomass and bioenergy. [P.L. 109-58, Sec. 932]	Amends Sec. 932 of P.L. 109-58 to include research on energy efficiency at biorefineries and on technology to convert existing corn-based ethanol plants to process cellulosic materials. [Sec. 224]	No comparable provision.	No comparable provision.	
<b>Study of Optimization of Flexible Fueled Vehicles to use E-85 Fuel</b>	No prior provision.	The Secretary of Energy is directed to study whether optimizing flexible fuel vehicles (FFVs) to run on E85 would increase their fuel efficiency. [Sec. 225]	No comparable provision.	No comparable provision.	Current FFVs are optimized to run on gasoline, since that tends to be their primary fuel.
<b>Study of Engine Durability and Performance Associated with the Use of Biodiesel</b>	No current provision.	The Secretary of Energy, in consultation with the EPA Administrator, is directed to study the effects of various biodiesel/diesel blends on engine performance and durability. [Sec. 226]	No comparable provision.	No comparable provision.	
<b>Study of Optimization of Biogas Used in Natural Gas Vehicles</b>	No prior provision.	The Secretary of Energy is directed to study the potential for optimizing natural gas vehicles to run on biogas (methane produced from biological feedstocks). [Sec. 227]	No comparable provision.	No comparable provision.	

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<b>Algal Biomass</b>	Various statutes promote biofuels R&D, including the development of biofuels from algae, at the Department of Energy.	The Secretary is required to report to Congress on progress toward developing algae as a feedstock for biofuel production. [Sec. 228]	No comparable provision.	No comparable provision.	
<b>Biofuels and Biorefinery Information Center</b>	No prior provision.	Directs the Secretary of Energy to establish a technology transfer center to provide information on biofuels and biorefineries. [Sec. 229]	No comparable provision.	No comparable provision.	
<b>Cellulosic Ethanol and Biofuels Research</b>	No prior provision.	Authorizes the Secretary of Energy to provide biofuels R&D grants to 10 institutions from land-grant colleges, Historically Black Colleges or Universities, tribal serving institutions, or Hispanic serving institutions. \$50 million for FY2008 is authorized to be appropriated, to be available until expended. [Sec. 230]	No comparable provision.	No comparable provision.	
<b>Bioenergy R&amp;D - Authorization of Appropriation</b>	The Secretary of Energy is directed to conduct R&D on biomass, bioenergy, and bioproducts. A total of \$525 million is authorized for FY2008-FY2009. [P.L. 109-58, Sec. 931(c)]	Amends Sec. 931 of P.L. 109-58 to authorize a total of \$1.2 billion for FY2008-FY2010 for R&D on biomass, bioenergy, and bioproducts. [Sec. 231]	No comparable provision.	Amends Section 1419(d) of the National Agricultural Extension and Teaching Policy Act of 1977 (7 U.S.C. 3254(d)) to extend appropriations of \$20	Funding for related biomass research through the Department of Agriculture is contained in Sec. 9006 of the House farm bill.

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				million annually through 2012 for research on production and marketing of alcohols and industrial hydrocarbons from agricultural and forest feedstocks. [Sec. 7008]	
<b>Environmental Research and Development</b>	DOE is required to establish a program of research, development, and demonstration in microbial and plant systems biology, protein science, and computational biology. Biomedical research and research related to humans are not permitted as part of the program. [P.L. 109-58, Sec. 977]	DOE is required to expand the biological R&D program established in Sec. 977 of P.L. 109-58 to include environmental effects, potential for greenhouse gas reductions, and the potential for more sustainable agriculture. [Sec. 232(a)]	No comparable provision.	No comparable provision.	See also Sec. 233 of EISA (below).
<b>Lifecycle Analysis Tools for Evaluating the Energy Consumption and Greenhouse Gas Emissions from Biofuels</b>	No prior provision.	The Secretary of Energy is required to study and develop tools for evaluating the lifecycle energy consumption and greenhouse gas emissions from biofuels. [Sec. 232(b)]	No comparable provision.	USDA is directed to study methods for evaluating the life-cycle greenhouse gas emissions of conventional fuels and biofuels, and to report to Congress results and recommendations for a method for evaluating the lifecycle greenhouse gas emissions of fuels. [Sec. 9020]	

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<b>Small-Scale Production and Use of Biofuels</b>	No prior provision.	Amends the Biofuels Research and Development Act of 2000 to require the Secretary of Agriculture to establish a R&D program to facilitate small-scale production and local and on-farm use of biofuels. [Sec. 232(c)]	No comparable provision.	No comparable provision.	
<b>Bioenergy Research Centers</b>	The Department of Energy (DOE) is required to establish a program of R&D and demonstration of microbial and plant systems biology, protein science, and computational biology. Biomedical research and research related to humans are not permitted as part of the program. [Energy Policy Act of 2005, P.L. 109-58, Sec. 977]	Requires the establishment of at least seven research centers that focus on bioenergy to be included in the R&D program established in Sec. 977 of P.L. 109-58. [Sec. 233]	No comparable provision.	No comparable provision.	See also Sec. 232(a) of EISA (above), which would expand the topics covered by the program.
<b>University Based Research and Development Grant Program</b>	No prior provision.	Requires the Secretary of Energy to establish a program of competitive grants to institutions of higher education for research on renewable energy technologies. Each grant may not exceed \$2 million. A total of \$25 million is authorized for the program. [Sec. 234]	No comparable provision.	No comparable provision.	



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<b>Prohibition on Franchise Agreement Restrictions Related to Renewable Fuel Infrastructure</b>	No prior provision.	Amends the Petroleum Marketing Practices Act (15 U.S.C. 2801 et seq.) to make it unlawful for a franchiser to prohibit a franchisee from installing E85 or B20 tanks and pumps within the franchise agreement. [Sec. 241]	No comparable provision.	No comparable provision.	
<b>Renewable Fuel Dispenser Requirements — Report to Congress</b>	No prior provision.	The Secretary of Energy is required to report to Congress on the market penetration of flexible fuel vehicles and on the feasibility of requiring fuel retailers to install E85 infrastructure. [Sec. 242]	No comparable provision.	No comparable provision.	
<b>Ethanol Pipeline Feasibility Study</b>	No prior provision.	The Secretary of Energy, in consultation with the Secretary of Transportation, is required to report on the feasibility of constructing dedicated ethanol pipelines. \$1 million is authorized annually for FY2008 and FY2009. [Sec. 243]	No comparable provision.	USDA is required to study the infrastructure needs associated with an expansion in biofuel production, including pipeline feasibility. [Sec. 9018]	Ethanol is currently transported by rail, truck, or barge to gasoline pipeline terminals for blending into gasoline.
<b>Renewable Fuel Infrastructure Development</b>	No prior provision.	Directs the Secretary of Energy to provide grants for conversion assistance, technical and marketing assistance, and pilot programs to expand	No comparable provision.	Provides cost-share grants of up to 20% of total costs for installation of E-85 fuel infrastructure. Authorizes a total of \$20	

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		<p>infrastructure for ethanol/gasoline blends of between 11% and 84% ethanol, and renewable fuel/diesel fuel blends of at least 10% renewable diesel. \$200 million is authorized annually for FY2008-FY2014. [Sec. 244]</p>		<p>million for FY2008-FY2012 to remain available until expended. [Sec. 9021]</p>	
<p><b>Study of the Adequacy of Transportation of Domestically-Produced Renewable Fuel by Railroads and Other Modes of Transportation</b></p>	<p>No prior provision.</p>	<p>The Secretary of Energy, jointly with the Secretary of Transportation, is required to report on the adequacy of railroads and modes for transportation of domestically produced renewable fuel. [Sec. 245]</p>	<p>The Secretary of Agriculture, in coordination with the Secretary of Transportation, is required to study and report on railroad issues related to the movement of agricultural products, including domestically produced renewable fuels. [Sec. 6032]</p>	<p>No comparable provision.</p>	
<p><b>Federal Fleet Refueling Centers</b></p>	<p>No prior provision.</p>	<p>Requires the head of each federal agency to install at least one renewable fuel pump at each federal fleet refueling center by January 1, 2010. Further, the President is required to report each October 31 on progress toward meeting this requirement. The requirement does not apply to Department of Defense fueling centers with less than 100,000</p>	<p>No comparable provision.</p>	<p>No comparable provision.</p>	

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		gallons in annual fuel turnover. [Sec. 246]			
<b>Standard Specifications for Biodiesel</b>	No prior provision.	If ASTM International (originally the American Society for Testing and Materials) has not adopted standards for B5 and B20 within one year of enactment, the EPA Administrator is required to do so. No new funding is authorized. [Sec. 247]	No comparable provision.	No comparable provision.	
<b>Biofuels Infrastructure</b>	No prior provision.	Directs the Secretary of Energy to conduct an R&D program on the effects of biofuels on existing transportation fuel distribution systems. [Sec. 248]	No comparable provision.	Directs USDA to study the infrastructure needs associated with a significant expansion in biofuel production and use. Specifically includes dedicated ethanol pipeline feasibility studies and examination of water resource needs. Authorizes \$1 million for each of FY2008-FY2012. [Sec. 9018]	
<b>Waiver for Fuel or Fuel Additives</b>	Under Sec. 211(f) of the Clean Air Act, no new fuels or fuel additives may be introduced into commerce unless granted a waiver by EPA. If EPA has not acted	Prohibits the introduction of new renewable fuels or renewable fuel additives unless EPA explicitly grants a waiver under Sec. 211(f) of the Clean Air Act. EPA is required to	No comparable provision.	No comparable provision.	Before the passage of EISA, inaction or failure to complete review of an additive by EPA allowed a fuel to receive the waiver.

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	within 180 days of receipt of a waiver request, the waiver is treated as granted. [42 U.S.C. 7545(f)]	take final action within 270 days of receipt of the waiver request. [Sec. 251]			Under EISA, no waiver would be granted without <i>explicit</i> approval by EPA.
<b>P.L. 110-140, Title V — Energy Savings in Government and Public Institutions</b>					
<b>Capitol Complex E-85 Refueling Station</b>	No prior provision.	The Architect of the Capitol is authorized to install an E85 tank and pumping system on or near the Capitol Grounds Fuel Station. \$640,000 is authorized for FY2008. [Sec. 502]	No comparable provision.	No comparable provision.	
<b>Procurement and Acquisition of Alternative Fuels</b>	No prior provision.	Federal agencies are prohibited from procuring alternative or synthetic transportation fuels if the lifecycle emissions exceed those of petroleum-based fuels. [Sec. 526]	No comparable provision.	No comparable provision.	
<b>P.L. 110-140, Title VIII — Improved Management of Energy Policy</b>					
<b>Sense of Congress Relating to the Use of Renewable Resources to Generate Energy</b>	No prior provision.	Expresses the Sense of the Congress that renewable resources from agriculture and forestry should provide at least 25% of all U.S. energy needs by 2025. [Sec. 806]	Expresses the Sense of the Congress that it is in the interest of the United States to diversify its energy portfolio and promote energy security through renewable energy. [Sec. 9016]	Sense of Congress encouraging higher levels of ethanol- blended gasoline (i.e., intermediate blends such as E13, E15, E20 and higher). [Sec. 9002]	

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<b>House Farm Bill — H.R. 2419 (House Version)</b>					
<b>Federal Procurement of Biobased Products</b>	Under the 2002 farm bill, federal agencies are currently required to purchase biobased products under certain conditions. Current law authorizes a voluntary biobased labeling program. USDA regulations define biobased products, identify biobased product categories, and specify the criteria for qualifying those products for preferred procurement. Mandatory Commodity Credit Corporation (CCC) funding of \$1 million is authorized for each of FY2002-FY2007 for testing biobased products. [P.L. 107-171, Sec. 9002]	No comparable provision.	Clarifies that products with at least 5% of intermediate ingredients and feedstock that are biobased should be considered under the preference. Requires USDA to complete rulemaking on labeling regulation. Provides mandatory CCC funding of \$2 million for each of FY2008-FY2012 for bio-product testing, labeling, and procurement research, promotion, and awareness initiatives. [Sec. 9002]	Clarifies that biobased intermediate ingredients and feedstocks qualify under the program. It also requires the Secretary of Agriculture to establish a voluntary labeling program for biobased products — “USDA Certified Biobased Product.” Provides grants for education and awareness of bioenergy and biobased products. Provides \$3 million per year in mandatory funding for FY2008-FY2012. [Sec. 9002]	
<b>Loan Guarantees and Grants for Biorefineries and Biofuel Production Plants</b>	The Energy Policy Act of 2005 directs DOE to provide loan guarantees for various renewable energy and low-emission energy projects. [P.L. 109-58, Sec. 1703]  The 2002 farm bill authorized a grant program	No comparable provision.	Extends the 2002 farm bill biorefinery development program through FY2012 and provides new loan guarantee authority for biorefineries, with a total of \$600 million going to loans of less than \$100 million, and \$1 billion for loans up to \$250 million. The loan	Revises P.L. 107-171, Sec. 9003, to promote “advanced biofuel” production in renewable-fuel-powered facilities. Provides grants for pilot- and demonstration-scale plants; matching funds for feasibility studies, and	

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	<p>to help finance the cost of developing and constructing biorefineries and biofuel production plants to carry out projects to demonstrate the commercial viability of converting biomass to fuels or chemicals. However, no funds have been appropriated for the program. [P.L. 107-171, Sec. 9003]</p>		<p>guarantee would cover 90% of an eligible loan. Requires that construction contractors and subcontractors on federally assisted loan guarantee projects pay their employees not less than the prevailing wage in the same locality under the Davis-Bacon Act. Specifies mandatory CCC funding of up to \$800 million for FY2008-FY2012. [Sec. 9003]</p>	<p>grants for up to 20% of total costs to convert fossil-fueled biomass facilities to renewable resources; and provides loan guarantees for up to 80% of total eligible costs for the development and construction of commercial-scale plants. Provides \$300 million in mandatory funding for FY2008-FY2012. [Sec. 9005]</p>	
<p><b>Energy Audit and Renewable Energy Development Program</b></p>	<p>This is a competitive grant program for eligible entities to carry out a program to assist farmers, ranchers, and rural small businesses in becoming more energy efficient and in using renewable energy technology and resources. Authorized appropriations of such sums as are necessary to carry out the program for FY2002-FY2007. [P.L. 107-171, Sec. 9005]</p>	<p>No comparable provision.</p>	<p>Extends the 2002 farm bill Energy Audit and Renewable Energy Development Program through 2012. [Sec. 9004]</p>	<p>Extends the Energy Audit and Renewable Energy Development Program through FY2012, but folds it into the new Rural Energy for America Program where mandatory funding is available (see next section for more information). [Sec. 9007]</p>	

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<b>Renewable Energy Systems and Energy Efficiency Improvements</b>	<p>This program authorizes loans, loan guarantees, and grants to farmers, ranchers, and rural small businesses to purchase and install renewable energy systems and to make energy efficiency improvements. Mandatory CCC funding of \$23 million annually for FY2003-FY2007. [P.L. 107-171, Sec. 9006]</p>	<p>No comparable provision.</p>	<p>Renamed as the “Rural Energy for America Program.” Raises the loan guarantee level from \$10 million to \$25 million. Grant fund cost share is retained at up to 25% of project costs; however, combined grants and loans (including guarantees) is expanded to 75% of project cost. Allows for feasibility studies to be eligible for the program. Increases mandatory CCC funding to a total of \$500 million for FY2008-FY2012. [Sec. 9005]</p>	<p>Renamed as the “Rural Energy for America Program,” adds the option to receive a production incentive payment in lieu of a grant, and stipulates that a grant may cover up to 25% of project costs while a loan guarantee may cover up to 75% of the cost. Sets aside a portion of funds for manure-to-energy facilities such as methane digesters. Streamlines grant and loan applications for small-scale projects (under \$20,000), and requires that 20% of funds be used for such projects.</p> <p>Extends EPA’s Energy Star Program to identify and promote energy-efficient equipment and facilities in the agricultural sector.</p> <p>Provides \$230 million in mandatory funding for FY2008 to remain available until expended, with not less than 15% of</p>	

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				this funding dedicated to the animal manure-to-energy provision. [Sec. 9007]	
<b>Biomass Research and Development Act of 2000</b>	The Biomass Research and Development Act of 2000 (reauthorized by the 2002 farm bill) provides competitive funding for R&D and demonstration projects on biofuels and bio-based chemicals and products, administered jointly by USDA and DOE. Specified mandatory CCC funding of \$5 million in FY2002 and \$14 million annually for FY2003-FY2007 to remain available until expended. Also authorized appropriations of \$200 million for each of FY2006-FY2015. [P.L. 107-171, Sec. 9008]	No comparable provision.	Modifies and extends the Biomass Research and Development Program through FY2012. Adds mandatory CCC funding of \$420 million total for FY2008-FY2012. Also maintains the existing authorization of appropriations of \$200 million annually for FY2008-FY2015. [Sec. 9006]	Extends the program and moves it in statute to this act. Adds new emphasis on utilization of byproducts such as dried distillers grains and solubles (DDGS) and development of technologies for harvest, storage, preprocessing and transportation of renewable biomass feedstocks. Provides a total of \$75 million in mandatory funding during FY2008-FY2012. Authorizes appropriations of \$85 million in each of FY2008-FY2012. [Sec. 9008]	
<b>Adjustments to the Bioenergy Program</b>	Originally a Clinton Administration initiative, the Bioenergy Program was made statutory by the 2002 farm bill. The program provides CCC incentive payments to biofuels	No comparable provision.	Renews and extends the 2002 farm bill Bioenergy Program through 2012 with a total of \$1.4 billion in mandatory CCC funding for FY2008-FY2012. Ethanol produced from corn starch is	Renews and extends the Bioenergy Program through FY2012. Bases the payment rate on: (1) biofuel production, (2) feedstock prices, and (3) net non-renewable energy	The Senate farm bill provision will likely benefit those purchasing feedstocks for cellulosic biofuels and biodiesel.



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	<p>producers based on year-to-year increases in the quantity of biofuel produced. Mandatory CCC funding of \$150 annually for FY2002-FY2006. No funding was available for FY2007. [P.L. 107-171, Sec. 9010]</p>		<p>excluded. Renewable diesel produced from biomass at petroleum refineries may be excluded, as well. Expands eligibility for combined heat and power production using biomass at biofuels plants and biomass gasification as types of bioenergy eligible for the production incentive. [Sec. 9007]</p>	<p>content of the fuel. The program is not available to those claiming a biofuel production tax credit or with biofuel production capacity greater than 150 million gallons per year. Provides \$245 million in mandatory funding for FY2008-FY2012. [Sec. 9006]</p>	
<p><b>Research, Extension, and Educational Programs on Biobased Energy Technologies and Products</b></p>	<p>The “Sun Grant” program established 5 national sun grant research centers based at land-grant universities and each covering a different region. The purpose is to enhance coordination and collaboration between USDA, DOE, and land-grant universities in the development, distribution, and implementation of biobased energy technologies. Authorized appropriations of \$25 million in FY2005, \$50 million in FY2006, and \$75 million annually for FY2007-FY2010.</p>	<p>No comparable provision.</p>	<p>Extends the Sun Grant program through 2012 with authorized appropriations of \$75 million for each of FY2008-FY2012, and establishes a 6th regional center — Western Insular Pacific Sub-Center — at the University of Hawaii. [Sec. 9008]</p>	<p>Reauthorizes the Sun Grant program through FY2012 and establishes a Western Insular Pacific Sub-Center at the University of Hawaii. Competitive grants are available to land-grant schools within each region. Provides, for the first time, mandatory funding for the Sun Grant program of \$5 million in FY2008, \$10 million in each of FY2009 and FY2010 (available until expended) for a total of \$25 million for FY2008-FY2012. Further authorizes appropriations of \$70</p>	

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				million in each of FY2008-FY2015. [Sec. 9009]	
<b>Energy Council of the Department of Agriculture</b>	No current provision.	No comparable provision.	Directs the Secretary of Agriculture to establish an energy council to coordinate the energy policy of USDA and consult with other federal departments and agencies. [Sec. 9009]	Expands and codifies the scope of responsibilities of the USDA related to the coordination of energy programs and specifies that USDA should have one entity serving as central coordinator for these programs. Responsibilities of the coordinating entity include oversight and coordination of energy-related activities within USDA, as well as coordination of related activities with other federal, state, and local agencies. [Sec. 9017]	
<b>Farm Energy Production and Use Pilot Program</b>	No current provision.	No comparable provision.	Establishes a pilot program to provide grants to farmers to demonstrate the feasibility of making a farm become energy neutral using existing technologies. Authorizes a total of \$5 million for FY2008-FY2012. [Sec. 9010]	No comparable provision.	See also House farm bill, Sec. 9015 (below).

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<b>Rural Energy Self-Sufficiency Initiative Grant Program</b>	No current provision.	No comparable provision.	Establishes the Rural Energy Self-Sufficiency Initiative to provide cost-share grants to enable eligible rural communities (of less than 25,000) to substantially increase their energy self-sufficiency. The grant may not exceed 75% of costs. Requires a report to Congress on best practices/ approaches. Total grants under this section are limited to no more than 5 per year, and authorizes appropriations of not more than \$5 million for FY2008, and such sums as are necessary for FY2009-FY2012. [Sec. 9011]	Establishes a program — the Rural Energy Systems Renewal Program — of competitive cost-shared grants for rural communities to assess their energy systems and formulate strategies for improvements. Authorizes discretionary funding of \$5 million for each of FY2008-FY2012. [Sec. 9015]	
<b>Agricultural Biofuels from Biomass Internship Program</b>	No current provision.	No comparable provision.	Provides 3rd and 4th year undergraduate or graduate students from universities in states with substantial farm-based economies the opportunity to work with U.S. government and non-governmental organizations on matters pertaining to renewable energy policies. Requires states to match \$1 for every \$2 of federal funds.	No comparable provision.	

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			Authorizes such sums as are necessary to carry out the program. [Sec. 9012]		
<b>Feedstock Flexibility Program for Bioenergy Producers</b>	No current provision.	No comparable provision.	Requires that USDA establish and administer (starting in FY2008) a sugar-for-ethanol program using sugar intended for food use but deemed by USDA to be in surplus. USDA would implement the program only in those years when purchases are determined to be necessary to ensure that the sugar program operates at no cost. Such sums as are necessary to carry out the program are authorized. [Sec. 9013]	Substantially similar to House farm bill. [Sec. 1501(f)]	
<b>Biomass Inventory Report</b>	No current provision.	No comparable provision.	Instructs USDA to conduct a national inventory of biomass resources on a county-by-county basis. [Sec. 9014]	No comparable provision.	
<b>Future Farmsteads Program</b>	No current provision.	No comparable provision.	Establishes a program to equip farm entities (house and lands), in each of 5 regions of the country, with technologies to improve	Identical provision to House farm bill. [Sec. 9025]	See also House farm bill, Sec. 9010 (above).

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			farm energy production and use efficiencies. Each designated entity would serve as a working example to farmers and as an educational, research, and demonstration facility for research related to renewable energy or energy conservation technologies. Authorizes such sums as are necessary to carry out the program. [Sec. 9015]		
<b>Biodiesel Fuel Education Program</b>	This program awards competitive grants to nonprofit organizations that educate governmental and private entities operating vehicle fleets, and educate the public about the benefits of biodiesel fuel use. Mandatory CCC funding of \$1 million annually was authorized for FY2003-FY2007. [P.L. 107-171, Sec. 9004]	No comparable provision.	Extends the 2002 farm bill Biodiesel Fuel Education Program through FY2012 with mandatory funding of \$2 million for each of FY2008-FY2012. [Sec. 9017]	Identical provision to House farm bill. [Sec. 9003]	
<b>Financial Assistance for the Production of Biomass Energy Crops</b>	No current provision.	No comparable provision.	Establishes a new Biomass Energy Reserve (BER). Provides financial and technical assistance (including five-year	Creates the Biomass Crop Transition Program to stimulate production of biomass crops. USDA provides assistance with	

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			<p>contracts) to landowners and operators to grow dedicated energy crops as feedstock for cellulosic ethanol and other energy production. Incentives also cover producer harvesting, storing, and transporting of biomass to bioenergy facilities. BER projects would have to be within a 50-mile radius of a bioenergy facility. Authorizes mandatory funding of such sums as are necessary. [Sec. 9018]</p>	<p>establishment costs for the production of bioenergy crops for use in a biomass conversion facility. Provides \$130 million in mandatory funding for FY2008-FY2012 to support biomass production. [Sec. 9004(g)]</p>	
<b>Alternative Fuel Database and Materials</b>	No current provision.	No comparable provision.	<p>As part of new Biomass Energy Reserve program (see next page XX), participants are required to submit relevant information to the Secretary of Agriculture for inclusion in a public best practices database. [Sec. 9018(l)]</p>	<p>Similar provision to House farm bill. [Sec. 9004(f)]</p>	
<b>Grants for Infrastructure for Transportation of Biomass to Local Biorefineries</b>	No current provision.	No comparable provision.	<p>Allows the Secretary of Agriculture to provide matching payments for the collection, harvesting, storage and transport of biomass to biorefineries.</p>	<p>Requires the Secretary to provide payments for the collection, harvesting, storage and transport of biomass to biorefineries. A fixed rate per ton would</p>	

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			The Secretary may match payments by biorefineries dollar-for-dollar up to \$45 per ton. [Sec. 9018(m)]	be determined by the Secretary. [Sec. 9004(d)]	
<b>Forest Bioenergy Research Program</b>	No current provision.	No comparable provision.	Establishes a new R&D program to promote the use of woody biomass for bioenergy production, including addressing feedstock issues such as yield and new varieties. A total of \$75 million in mandatory CCC funding is provided for FY2008-FY2012. [Sec. 9019]	Similar to House farm bill, except that discretionary (not mandatory) funding is authorized at \$5 million for each of FY2008-FY2012. [Sec. 9013]	
<b>Community Wood Energy R&amp;D Program</b>	No current provision.	No comparable provision.	New competitive research and development program to encourage the use of woody biomass for bioenergy production. Provides mandatory CCC funding of \$15 million for each of FY2008-FY2012. [Sec. 9019]	Substantially similar to House farm bill, except that \$5 million annually is authorized (not mandatory) for FY2008-FY21012. [Sec. 9014]	
<b>Supplementing Corn as an Ethanol Feedstock</b>	No current provision.	No comparable provision.	New grant program for demonstration of supplementing corn as an ethanol feedstock with sweet sorghum and switchgrass.	No comparable provision.	

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			The program permits grants of up to \$1 million each to no more than 20 universities for three-year demonstration programs. Authorizes funding of \$20 million. [Sec. 9020]		
<b>Senate Farm Bill — H.R. 2419 (Senate Version)</b>					
<b>Regional Biomass Crop Experiments</b>	No current provision.	No comparable provision.	No comparable provision.	Provides competitive grants to land-grant universities to establish regional bioenergy crop research experiments. Crop experiments are to include all appropriate biomass plant species, including perennials, annuals, and woody biomass species. Provides mandatory funding of \$40 million for FY2008-FY2012. [Sec. 9010]	



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<b>Biochar Research, Development and Demonstration</b>	No current provision.	No comparable provision.	No comparable provision.	Creates a program of competitive R&D grant program for the production and use of biochar in the agricultural sector. Authorizes \$3 million for each of FY2008-FY2012. [Sec. 9012]	“Biochar” is defined as charcoal or biomass-derived black carbon that is added to soil to improve soil fertility, nutrient retention, and carbon content.
<b>Voluntary Renewable Biomass Certification Program</b>	No current provision.	No comparable provision.	No comparable provision.	Establishes a voluntary certification program for renewable biomass that is grown using sustainable practices. No new funding. [Sec. 9016]	
<b>Rural Nitrogen Fertilizer Study</b>	No current provision.	No comparable provision.	No comparable provision.	Directs USDA to assess the feasibility of producing nitrogen fertilizer from renewable energy. Authorizes \$1 million for FY2008. [Sec. 9019]	
<b>Research and Development on Renewable Energy</b>	No current provision.	No comparable provision.	No comparable provision.	Requires USDA to research, with the Colorado Renewable Energy Collabor-atory, on renewable energy including biomass crops adapted to arid regions, and storage and conversion technologies	

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				for wind and solar energy. Authorizes \$5 million for each of FY2008-FY2012. Additional authorization of \$110 million annually for FY2008-FY2012 for cellulosic biofuel research. Additional authorization of \$110 million annually for FY2008-FY2012 for small-scale biorefinery R&D. [Sec. 9022]	
<b>Northeast Dairy Nutrient Management and Energy Development Program</b>	No current provision.	No comparable provision.	No comparable provision.	Establishes an R&D grant program to provide for a consortium of Northeast U.S. land-grant colleges and universities for projects on dairy nutrient management and energy development. Authorizes such sums as are necessary. [Sec. 9023]	
<b>Expansion of Special Allowance to Cellulosic Biomass Alcohol Fuel Plant Property</b>	The Tax Relief and Health Care Act of 2006 allows 50% tax depreciation in the first year of operation for plants that produce ethanol from cellulosic biomass. [P.L. 109-432, Sec. 209]	No comparable provision.	No comparable provision.	Expands the special allowance to plants that produce all alcohols (not just ethanol) produced from cellulosic biomass. [Sec. 12311]	

Topic	Current or Prior Law	Energy Independence and Security Act (P.L. 110-140)	House Farm Bill — H.R. 2419 (House Version)	Senate Farm Bill — H.R. 2419 (Senate Version)	Notes
<b>Tax Credit for Production of Cellulosic Alcohol</b>	All fuel ethanol is allowed a tax credit of \$0.54 per gallon, regardless of feedstock. Small producers may claim an additional credit of \$0.10 per gallon. [26 U.S.C. 40]	No comparable provision.	No comparable provision.	Establishes a credit for small producers of cellulosic biomass alcohol through April 1, 2015. The value of the credit, plus the existing small ethanol producer credit and alcohol fuels credits can not exceed \$1.25 per gallon. Currently, the credit would be worth \$0.58 per gallon, but would increase as the other credits decrease or phase out. [Sec. 12312]	
<b>Extension of Small Ethanol Producer Tax Credit</b>	The Omnibus Budget Reconciliation Act of 1990 established a credit of \$0.10 per gallon for each gallon of ethanol produced by a small producer, up to 15 million gallons annually. A small producer is defined as one with less than 60 million gallons in annual production capacity. [P.L. 101-508, Sec. 11502]	No comparable provision.	No comparable provision.	Extends the credit through December 31, 2012. (The credit is currently available through December 31, 2010.) [Sec. 12313]	
<b>Tax Credit for Producers of Fossil-Free Alcohol</b>	No current provision.	No comparable provision.	No comparable provision.	Establishes a credit of \$0.10 per gallon (in addition to any other credit), up to 60 million	

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				gallons, for the production of alcohol at a facility for which at least 90% of the energy used to operate the facility is biomass-derived. [Sec. 12314]	
<b>Modification of Alcohol Tax Credit</b>	The American Jobs Creation Act of 2004 established a tax credit for the use of ethanol used as motor fuel. The credit is valued at \$0.51 per gallon of ethanol blended into gasoline. [P.L. 108-357, Sec. 301]	No comparable provision.	No comparable provision.	In the first calendar year after EPA certifies that 7.5 billion gallons of renewable fuel have been blended into gasoline, the credit is reduced to \$0.46 per gallon. [Sec. 12315]	
<b>Calculation of Volume of Alcohol for Fuel Tax Credits</b>	Currently, any denaturant added to alcohol is considered as part of the volume of alcohol for tax purposes. [26 U.S.C. 40(d)(4)]	No comparable provision.	No comparable provision.	The volume of any denaturant would be excluded from the applicable volume for tax purposes. [Sec. 12316]	A denaturant is added to ethanol to make it unfit for human consumption. In most cases, gasoline is used as the denaturant for fuel ethanol.
<b>Ethanol Tariff Extension</b>	In general, fuel ethanol imports are subject to a \$0.54 per gallon duty and a 2.5% ad valorem tariff. The duties expire January 1, 2009. [P.L. 99-499]	No comparable provision.	No comparable provision.	Extends the duties through December 31, 2010. [Sec. 12317]	

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<b>Elimination and Reductions of Duty Drawback on Certain Imported Ethanol</b>	Currently, if a manufacturer imports an intermediate product then exports the finished product or a similar product, that manufacturer may be eligible for a refund (drawback) of up to 99% of the duties paid. The duty drawback provisions include special provisions for the production of petroleum derivatives.	No comparable provision.	No comparable provision.	To qualify for the drawback, the exported product must contain ethanol for which duties have been previously paid. [Sec. 12318]	In the case of fuel ethanol, currently in many cases the imported ethanol is used as a blending component in gasoline. Jet fuel (containing no ethanol, but considered a “like commodity” to the finished gasoline) is exported to qualify for the drawback in lieu of finished gasoline containing the originally imported ethanol.
<b>Extension and Modification of Credits for Biodiesel and Renewable Diesel</b>	A tax credit is available for the retail sale or use of biodiesel and renewable diesel. The credit is equal to \$1.00 per gallon for renewable diesel or biodiesel produced from virgin agricultural products. The credit expires on December 31, 2008. [P.L. 108-357, P.L. 109-58]	No comparable provision.	No comparable provision.	Extends the biodiesel tax credit through December 31, 2010, and the small agri-biodiesel producer tax credit through December 31, 2012. Further, the amount of biodiesel coprocessed with petroleum eligible for the credit is limited to 60 million gallons. [Sec. 12321]	The modification in the Senate farm bill is presumably to limit the amount of credit claimed for renewable diesel produced at existing petroleum refineries.
<b>Treatment of Qualified Alcohol</b>	Currently, qualified alcohol and qualified biodiesel fuel	No comparable provision.	No comparable provision.	Amends the tax code to define qualified alcohol	In some cases currently, a small

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<b>Mixtures and Qualified Biodiesel Fuel Mixtures as Taxable Fuel</b>	mixtures are not considered taxable fuel. Some fuel mixtures therefore may be eligible for tax credits even though they are not subject to fuels taxes.			and biodiesel fuel mixtures as taxable fuel. [Sec. 12322]	amount of biodiesel is added to diesel fuel, presumably to avoid the taxes on diesel fuel.
<b>Extension and Modification of Alternative Fuel Credit</b>	A tax credit of \$0.50 per gallon is available for the retail sale of alternative fuels, such as compressed natural gas and hydrogen (ethanol and biodiesel are subject to other tax incentives). For most fuels (other than hydrogen), the tax credits expire December 31, 2009. [P.L. 109-59, Sec. 11113]	No comparable provision.	No comparable provision.	Extends the tax credits through December 31, 2010. Expressly allows credits for compressed or liquified gas produced from biomass. For coal-derived fuels, requires that the fuel must be produced at facilities that capture and sequester at least 50% of the facility's total carbon dioxide emissions. [Sec. 12331]	
<b>Extension and Modification of Alternative Fuel Vehicle Refueling Property Credit</b>	An owner of a retail fuel station may take a tax credit for the installation of alternative fuel tanks and pumps. The credit is equal to 30% of the cost of the installation, up to \$30,000. For alternative fuels other than hydrogen, the credit expires on December 31, 2009. [P.L. 109-58, Sec. 1342]	No comparable provision.	No comparable provision.	Extends the alternative fuel refueling property credit through December 31, 2010 for fuels other than hydrogen, but does not increase its value. [Sec. 12332]	